For Research Use Only

CoraLite® Plus 488-conjugated Phospho-AKT1 (Ser473) Recombinant antibody

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Catalog Number:CL488-80462

Basic Information

Catalog Number:
CL488-80462

Size:
1000 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_005163

GeneID (NCBI):
207

UNIPROT ID:
P31749

Full Name:
v-akt murine thymoma viral oncogene homolog 1

Observed MW:
56-62 kDa

Purification Method:
Protein A purification

CloneNo.:
2M10

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
FC (Intra)

Species Specificity:
Human, mouse

Background Information

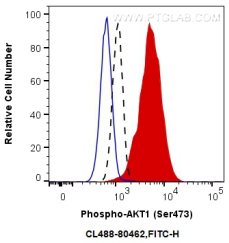
AKT is a serine/threonine kinase and it participates in the key role of the PI3K signaling pathway. Phosphatidylinositol-3 kinase (PI3K) is the key regulator of AKT activation. The recruitment of inactive AKT protein to PIP3-rich areas of the plasma membrane results in a conformational change that exposes the activation loop of AKT. AKT's activating kinase, phosphoinositide-dependent protein kinase (PDK1) , is also recruited to PIP3 microdomains. PDK1 phosphorylates AKT on threonine 308 (Thr308) of the exposed activation loop, activating AKT and leading to a second phosphorylation of AKT at serine 473 (Ser473) by a kinase presumed to be mTORC2 that further potentiates kinase activity. Active AKT will phosphorylate various downstream protein targets that control cell growth and translational control and act to suppress apoptosis. (PMID: 31594388, PMID: 30808672). 80462-1-RR specifically recognizes AKT1 phosphorylated at Ser473.

Storage

Storage:
Store at -20°C. Avoid exposure to light.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

Selected Validation Data



1X10^6 NIH/3T3 cells untreated (dashed line) or treated with Calyculin A (red) were intracellularly stained with 0.25 ug CoraLite® Plus 488 Anti-Human Phospho-AKT1 (Ser473) (CL488-80462, Clone:2M10), or 0.25 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.